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PN - JP2002171934 A20020618  
 PD - 2002-06-18  
 PR - JP20000403909 20001205  
 OPD - 2000-12-05  
 TI - METHOD FOR PRODUCING HEALTH SUPPLEMENTARY FOOD USING THIN COAT (SURFACE COAT) OF ONION AS RAW MATERIAL  
 IN - SHIODA HAJIMEBI;SHIODA TAKAHISA  
 PA - SHIODA KAZUKO;SHIODA HAJIMEBI;SHIODA TAKAHISA,SHIODA HISACHIKA  
 IC - A23L1/30 ; A23L1/212

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TI - Manufacture of health supplement food used in beverages, involves using pellicle of onion as raw material  
 PR - JP20000403909 20001205  
 PN - JP2002171934 A20020618 DW200265 A23L1/30 002pp  
 PA - (SHIO-I) SHIODA C  
 - (SHIO-I) SHIODA H  
 - (SHIO-I) SHIODA T  
 IC - A23L1/212 ;A23L1/30  
 AB - JP2002171934 NOVELTY - Manufacture of the health supplement food involves using a pellicle which is an outer skin of an onion, as a raw material.  
 - USE - For producing health supplement food used in beverages.  
 - ADVANTAGE - The amount of quercetin of a sulfur compound is high. The hypertension is prevented and the taste of the pellicle after drying is improved.  
 - (Dwg.0/0)  
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 TI - METHOD FOR PRODUCING HEALTH SUPPLEMENTARY FOOD USING THIN COAT (SURFACE COAT) OF ONION AS RAW MATERIAL  
 AB - PROBLEM TO BE SOLVED: To provide a method for producing a health supplementary food using as the raw material thin coat of onions, having high content of quercetin of a sulfur compound said to have an effect on hypertension prevention through an action of decomposing thrombus and

neutral lipid and conventionally thrown out in many cases, intended for contributing to prevention of geriatric diseases such as hypertension and bearing an aid in creating a healthy society.

- SOLUTION: This method for producing a health supplementary food comprises using as the raw material thin coat of onions, conventionally thrown out in many cases because of its inferior taste and subjecting the thin coat to a dry process with hot air at a temperature most suitable for the drying process to improve the inferior taste of the thin coat; whereby the health supplementary food containing a larger amount of quercetin bears an aid in creating a healthy society through popularized.

I - A23L1/30 ;A23L1/212

TRANSLATION

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**(54) [Title of the Invention]**

A method for the production of a health food employing the thin skins (surface skins) of onions as the starting material

**(57) [Abstract]**

[Problem] To help create a healthier society by preventing diseases of adults, such as high blood pressure, by the production of a health food (food supplement) using as the raw material the thin skins of onions which have hitherto been mostly thrown away but which have a high content of the sulphur compound quercetin said to have an effect in preventing high blood pressure by a thrombolytic and neutral lipid decomposing action.

[Resolution Means] In a method for the production of a health food using as the raw material the thin skins of onions which have hitherto been mostly thrown away on account of their poor taste, the poor taste of these thin skins is improved by a drying treatment with hot air of temperature most appropriate to the drying process and, in this way, a healthier society may be created by widely employing a health food containing a greater amount of quercetin.

**[Scope of Claim]**

[Claim 1] A method for the production of a health food employing the thin skins (surface skins) of onions as the raw material.

## **[Detailed Description of the Invention]**

**[Technical Field of the Invention]** The present invention relates to a method for the production of a health food based on the thin skins of onions as the raw material.

**[Prior Art]** Hitherto, in health foods which employ onions as a raw material, the thin skin comprising the surface skin of the onion has been peeled off due to its poor taste and only the main body of the onion used, while the thin skin portion has been discarded. Alternatively, both the thin skin and the main body of the onion have been jointly used but, when both are used together in this way, then the content of the quercetin which the source of the medicinal effects is markedly reduced in comparison to case when only the skin is used.

**[Problem to be Resolved by the Invention]** For a given weight of material, the thin skin of an onion has a higher content, than the onion body, of the sulphur compound quercetin said to have the action of breaking down blood clots and neutral lipids in blood vessels. Conventional health foods employing onions either use only the main body of the onion due to the poor taste of the thin skin, or they employ both the body and thin skin. When both are used, the quercetin content is markedly reduced in comparison to the use of the thin skin alone as the raw material.

**[Means for Resolving the Problem]** In order to improve the conventional methods where only the main body of the onion is used and the thin skin thrown away, or where

the main body and thin skin are both used as starting materials so that the poor taste remains and the quercetin content is lowered, according to the present invention the thin skins of onions are stirred and finely shredded in the presence of water, after which some of the water component is removed and then drying<sup>1</sup> carried out by means of hot air. In this way it is possible to improve the taste of the thin skins after drying.

[Mode of Practising the Invention] When carrying out the present invention in practice, the thin skins of onions are introduced into a mixer along with water and then mixing and fine-shredding carried out, after which some of the water component is eliminated in a juice extractor, and then drying is carried out with a hot air dryer. Subsequently, the dried material is subjected to a finishing stage to produce a granular health food using a mixer or grinding machine. The temperature of the hot air under such circumstances is important, and it is possible to use hot air in the range from 50 to about 300°C but it has been discovered that the poor taste of the thin skins can be improved by using hot air in the approximate range 100 to 160°C. In the case where the temperature of the hot air is too low, the poor taste of the thin skins remains, while if it is too high then a 'scorched' taste will be produced. Moreover, with drying methods other than hot air, the quality of the final product will not be uniform. The liquid obtained in the juice extraction process can itself be use as a liquid health food product.

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<sup>1</sup> Translator's comment: Strictly speaking incorrect characters have been used in the original and it does not actually say 'drying' in the Japanese text here. However, 'drying' is clearly intended.

[Effects of the Invention] When compared to conventional health foods employing only the main bodies of the onions or employing the main bodies and the thin skins together as raw materials, health foods based on the use of the thin skins alone as the raw material have a higher quercetin content per given weight and are valuable for the prevention of high blood pressure and the like.

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